

LPC 1110055008 - McHenry County
Mirage Development - Algonquin, IL
(aka Blue Sky Investments)
Superfund/Tech

US EPA RECORDS CENTER REGION 5



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930244

CERCLA

Preliminary Assessment

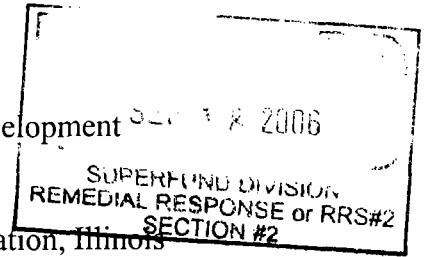


Illinois Environmental
Protection Agency

SIGNATURE PAGE

Title: CERCLA Preliminary Assessment for Mirage Development

Preparer: Dave Reed, Project Manager, Office of Site Evaluation, Illinois
Environmental Protection Agency



Dave Reed
Signature

9-13-06
Date

Reviewer: Tom Crause, Office Manager, Office of Site Evaluation, Illinois
Environmental Protection Agency

Tom Crause
Signature

9/14/06
Date

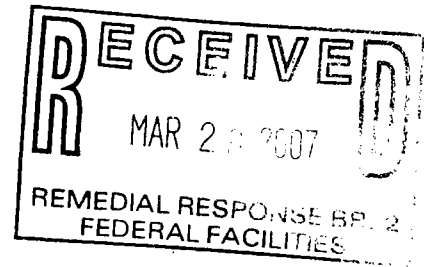
Approval: Laura J. Ripley, Environmental Scientist, United States Environmental
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Laura J. Ripley
Signature

03/28/2007
Date

REPORT WAS REVISED AND RESUBMITTED BY
IEPA ON 03/28/2007.

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CERCLA Preliminary Assessment

for:

**Mirage Development
ALGONQUIN, ILLINIOS
ILN# 000508644**

**PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
DIVISION OF REMEDIATION MANAGEMENT
OFFICE OF SITE EVALUATION**

March 21st, 2007

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1.0 Introduction

On August 11th, 2003, the Illinois Environmental Protection Agency (IEPA) was tasked by the United States Environmental Protection Agency Region V to conduct a Preliminary Assessment at Mirage Development (AKA Blue Sky Investments) in Algonquin, Illinois. This site is located at 401 Washington Street, Algonquin IL, in McHenry County. The latitude/longitude coordinates are 42°19'59.7"/-88°17'44.2". The Preliminary Assessment is performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) commonly known as Superfund.

1.1 Preliminary Assessment Purpose

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300) requires a Preliminary Assessment be performed on all sites entered into the Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS), U.S. EPA's inventory of hazardous waste sites.

A Preliminary Assessment is the initial step in the Superfund process that utilizes a limited-scope investigation that collects readily available information. The Preliminary Assessment distinguishes between sites that pose little or no threat to human health and the environment and sites that require further investigation. The Preliminary Assessment also

supports emergency response and removal activities, fulfills public information needs, and generally furnishes appropriate information about the site early in the assessment process.

If the findings of the Preliminary Assessment determine that further investigation is necessary, the site will continue through the Superfund process. If that determination is made, the site will receive a Screening Site Inspection. A Screening Site Inspection will evaluate the site in order to assure that adequate data will be collected for the removal assessment and the preparation of the Hazard Ranking System (HRS) score. At any time throughout the Superfund process, there will be a determination of whether the site should continue through either the remedial or removal programs or be designated as No Further Remedial Action Planned (NFRAP).

2.0 Site Background

2.1 Site Description:

Mirage Development (Mirage) was a manufacturing, processing, maintenance, and metal fabrication facility. The Mirage Development Site consists of 2 acres of land and a 450' by 72' three story building. The site is surrounded by a residential area as well as a preschool located to the south, the McHenry County Bike Trail located west and Crystal Creek which is located northeast of the site and is part of Towne Park. Water from the site drains into Crystal Creek, which flows southeast and empties into the Fox River, a fishery.

There is residential population of 5819 within a 1- mile radius of Mirage and a population of 23,276 within a 4- mile radius. There was a dilapidated fence surrounding the area, which was restored just prior to a July 2004 visit to the site. The fence looks sufficient to keep the area closed off, but there was one area that appeared to have been cut and bent back. This could

provide access to children playing around the site. During the 2004 visit, a second floor door propped open with a crate was observed, possibly providing building access to animals and people access to the building. There was broken glass and scrap metal around the perimeter of the fence. At least part of the building has electricity due to the observance of a red light over one entrance.

On site, there were drum piles throughout the area, drum storage areas, and an underground storage tank. These receptacles contain or once contained various metal contaminants, ~~(PCBs)~~ and ~~(VOCs)~~ ^{↑ volatile organic compounds} ~~(polychlorinated biphenyls)~~ *23 reply 03/25/2007*

2.2 Site History:

Mirage Development (Blue Sky Investments) was in operation from 1928 through 1989. The American Ironing Machine Company owned the site from 1928 to 1948 and manufactured ironing machines. From 1948 to 1956 the Speed Queen Corporation aka Barlow Seelig Manufacturing Company owned the site, and they produced commercial laundry equipment. McGraw Edison took over ownership from 1956 to 1980; it is possible that they continued to produce commercial laundry equipment. From 1980 to 1989 BIH Food Service Inc. and the Hussman Corporation owned the site. BIH produced food service equipment; but it is unknown what the Hussman Corporation produced. In 1989 Texas Star took over ownership and leased out portions of the building to smaller businesses. Some of these businesses included a sewing contractor, spa manufacturer, toy store, etc. In 2001, a private individual bought the company. This person currently has ownership and has paid back taxes.

The full history of industrial use includes the production of ironing machines, washing machines, commercial appliances, and whirlpool spas. Hazardous substances were likely used in

the production and maintenance of all of these products. An initial complaint was made in reference to Toastmaster in 1983. A Phase I audit was conducted in 1989, and a Phase I resurvey in March of 1992. In May of 1992, Versar (a private consulting firm) conducted a Phase II assessment, which included soil sampling. Versar concluded that there was high potential for extensive contamination of soil and groundwater. In 1994 monitoring wells were installed. The inspection also revealed drums of oils, greases, trichloroethylene, lacquer thinner, tar, toluene and latex paints. The presence of buried drums was also detected behind the building. These drums along with 20 five-gallon pails were removed in November of 2000 but it is likely that contaminants had already seeped into the ground due to the deterioration of the containers. There was also evidence of open dumping of hazardous waste. The presence of an underground storage tank at the southern end of the building on site was detected as well.

In 1996 to 1999 the Attorney General's Office conducted several inspections to investigate the allegations of open dumping and buried drums. A copy of the 1996 violation can be found in Attachment B.

2.3 Regulatory History:

Based upon available file information, the Mirage Development site does not appear to be subject to Resource Conservation and Act (RCRA) corrective action authorities. Information currently available does not indicate that the site is under the authority of the Atomic Energy Act (AEA), Uranium Mine Tailings Action (UMTRCA), or the Federal Insecticide, Fungicide, or Rodenticide Act (FIFRA).

3.0 Site Conditions:

3.1 Potential Sources:

Past industries that operated on the Mirage site, used several hazardous substances that were stored on site at various locations. There are drum piles located at the North end of the property where drums were also, at one time, buried in the ground. These drums contain(ed) PCBs and VOCs. There is also a drum storage area outside the building on site, at the northern end. An Underground Storage Tank (UST) was found on site outside the southern end of the building, this was thought to contain kerosene. There is a drainage pipe that opens to the ground at the back of the building (west side) and debris surrounding the fence around the site. Throughout the years of operation, open dumping of waste materials is known to have taken place. These contamination sources have contributed to metal contamination as well as contamination with PCBs and VOCs; including: 1,1,1- trichloroethane, trichloroethene, *see reply 03/24/2014* tetrachloroethene, tetrachloromethane, methylene chloride, toluene, ethylbenzene, and xylene, ketones, and in low levels, dibromomethane, 1,2,3- trichloropropane, and 1,1,2,2- tetrachloroethane.

3.2 Past Environmental Investigations:

Versar conducted a Phase I Environmental Audit of the Mirage Development property in 1989 and a Phase I resurvey on March 25, 1992. Several recommendations were made regarding future sampling and additional data requirements to be conducted at the Mirage Development site. During the original Phase I inspection, drums of oil, grease, trichloroethylene, laquer thinner, tar toluene, and latex paint were observed in and around the building. During the 1992 resurvey of the site, the site was occupied by a whirlpool manufacturer (ASA). The occupant

had in the past and/or was currently using some hazardous substances in the manufacture of whirlpool spas, including a methyl ethyl ketone/peroxide catalyst, acetone, paint, and polyester resins containing vinyl toluene and/or styrene. An area of old rusted drums was identified in the bank of a ravine adjacent to the northeast corner of the property. These drums were identified as being empty and badly rusted.

During May 21, 1992, Versar began the Phase II assessment. The purpose of Versar's sampling visit was to determine if any of the previously identified environmental concerns had potentially contaminated soil and groundwater. Soil and subsurface soil samples were collected and analyzed. The analytical results from the Phase II assessment revealed the presence of on-site contamination. Four types of contamination (metals, polychlorinated biphenyls (PCBs), petroleum products, and VOCs) were detected (Attachment A)

During the Phase II sampling effort, a small pipe was discovered adjacent to the western edge of the raised platform. When the cap was removed, organic vapor readings of approximately 100 parts per million (ppm) were obtained with an Hnu 101 photoionization detector (PID). The drum piles northeast of the fence were examined. Some of the drums were observed to contain a silvery gray solid, although all of these drums were previously thought to be empty. In addition, the soil core sample collected from the area just outside the fence near the drum pile had some material that appeared to be paint sludge mixed in the surface soil. Two small plastic-lined cardboard boxes filled with an oily substance and one gallon metal container of creosote oil were present in the scale house. In the basement of the building, a steel pump was present. The sump was about four feet in diameter and of unknown depth. An oily fluid was in the sump and the liquid level was about three feet below the surface of the floor. The brick walls that surround the 24,000 gallon oil storage tank were leaking oil in several locations and former

leaks that had dried into a tar-like consistency were observed dripping from the ceiling or the floor above at several locations in the tank room.

On June 20, 1996, an inspection was conducted by the Des Plaines Regional Office at the facility in response to a special request from the Office of the Attorney General. This special request was prompted by the McHenry County States Attorney's Office. During this investigation, it was discovered that the property lessee was Blue Sky Investments. At the time of this inspection, there were thirteen different companies occupying the building. Since taking possession of the building, Blue Sky Investments installed three groundwater-monitoring wells. Groundwater samples, collected by the lessee of the property at the time, from one of the wells showed that the groundwater was contaminated with high concentrations of chlorinated solvents. While another well located in the southern portion of the property revealed very low concentrations of contaminants. These laboratory analytical results were unavailable, but a narrative confirming the existence of the contaminants is available (Attachment B, June 20, 1996 Narrative). There were also approximately 80 drums of waste being stored behind the building.

On September 18 and 24, 1999, an inspection was conducted by the Des Plaines Regional Office at the site in response to a complaint that alleged that 50 drums of trichloroethylene were buried in the rear parking lot and causing groundwater contamination. During the initial September 1998 inspections, no evidence of buried drums were observed, but there were seven metal drums in poor condition which contained acetone, and twenty 5-gallon pails, some of which were labeled sealer, and a metal box containing batteries. On November 28 and 29, 2000, a state contractor removed these items.

During the September inspection, three on-site monitoring wells were sampled. The results of these samples revealed several VOCs above the 620 Class I Groundwater Quality Standards (Attachment C, September 1998 Groundwater Results).

3.3 Migration Pathways:

The Office of Site Evaluation identifies three migration pathways and one exposure pathway, as identified in CERCLA's Hazard Ranking System, by which hazardous substances may pose a threat to humans and/or the environment. Consequently, sites are evaluated on their known or potential impact to these pathways. The pathways are ground water migration, surface water migration, soil exposure, and air migration.

3.3.1 Groundwater Pathway

Algonquin's drinking water comes from a combined source of seven groundwater wells and serves an estimated population of 24,000 people (found on the IEPA, Source Water Assessment Program (SWAP) Fact Sheet). Two of the wells are approximately 1300 feet deep and draw water from the Ironton-Galesville Aquifer. One of the other wells is 910 feet deep and draws water from the St. Peter Sandstone Aquifer. The other wells are considered shallow and range from 104 to 347 feet in depth and draw from sand and gravel aquifers. The nearest two wells are between one and two miles from the site (Site Location Map and Well Location Map).

From previous samples collected from the three on-site monitoring wells, it was determined that VOCs had contaminated the shallow aquifer. It is unclear at this time at what depth the monitoring wells were screened. The results of the three samples revealed trichloroethylene, 1,1-dichloroethylene, cis-1,2-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and tetrachloroethylene above the 620 Class I Groundwater Quality Standards (Attachment C). There has not been any detection of VOCs in the city wells, according to information published by the Village of Algonquin. In addition, there do not appear to be any private drinking water wells located within a four mile radius of the site.

cc: Ripley 03/28/2007

3.3.2 Surface Water Pathway

Water from the site ultimately drains east towards Crystal Creek. Crystal Creek is approximately 100 yards east and north of the property. Crystal Creek flows about 300 yards from the site until it connects to the Fox River.

According to the Federal Emergency Management Flood Insurance Maps, Crystal Creek is within the 100-year flood plain, but the Mirage Development property is not. Information from the U.S. Department of the Interior Wetland Maps indicates that Crystal Creek is a perennial stream. These maps do not indicate any wetlands along Crystal Creek, or any wetlands nearby. The Fox River is listed as a fishery by the Illinois Department of Natural Resources (IDNR). Crystal creek is not listed as a fishery by IDNR, but people have been seen fishing the creek.

There is not any indication of any release of contaminants to the surface water. According to the Source Water Assessment Program at IEPA, there are no drinking water intakes within several miles of the site.

3.3.3 Soil Exposure:

A private contractor collected samples from the Mirage Development property in 1992. The analytical results from the soil samples indicated the presence of on-site contamination. Polychlorinated biphenyls (PCBs) were found in 1 sample at 2000 parts per billion (ppb). Total petroleum hydrocarbons (TPH) were detected in one sample at 560 parts per million (ppm). Volatile organic compounds (VOCs) were also detected across the site.

There are currently no workers on the site since the building has been vacated. There are no residents on the site. The nearest residence and nearest school are both less than ¼ of a mile away.

3.3.4 Air Route:

No air samples were collected during the preliminary assessment. The air migration pathway was not addressed during this investigation due to the fact that this pathway did not seem to pose a threat to humans or the environment. Most of the site is covered by buildings and pavement.

4.0 Summary and Conclusions

The drums that are still present and those that have been removed were predominately old and rusted and possibly leaking their contents into the ground. The contaminants may still be present in the soil on site, or they may have traveled into the groundwater. Any contaminants on the surface could be washed into Crystal Creek through floodwater, or run-off. Although this is possible, the dilution factor in Crystal Creek and Fox River would be high and contaminants may not be detected. Contaminants would more likely have settled and be detectable in the sediment in the creek/river bed.

Information from the Phase II Assessment as well as some limited data collected by IEPA indicates that some VOCs have impacted soils and ground water at Mirage Development. Access to the site is limited by a fence; therefore, the likelihood of human exposure to

contaminated soil is minimal. Although ground water in the vicinity of Mirage Development may be adversely affected, the Village of Algonquin has not detected any VOCs in their municipal supply wells. In addition, there do not appear to be any private wells within 4 miles of the site. No release to the air is suspected due to the area being covered by buildings and the lack of any odors or blowing particulates during the site reconnaissance.

5.0 References:

- CERCLA: Pre-Cerclis Action Report for Mirage Development: Algonquin IL (written by IEPA, Office of Site Evaluation, August 12th, 2002)
- TerraServer USA (<http://terraserver.microsoft.com/address.aspx>)
- Bureau of Land files for Mirage Development aka Blue Sky Investments
- IEPA Surface Water Assessment Program website (<http://maps.epa.state.il.us/water/swap/>)
- Site visit: July 14, 2004

Figure - 1

Figure 1
Site Location Map

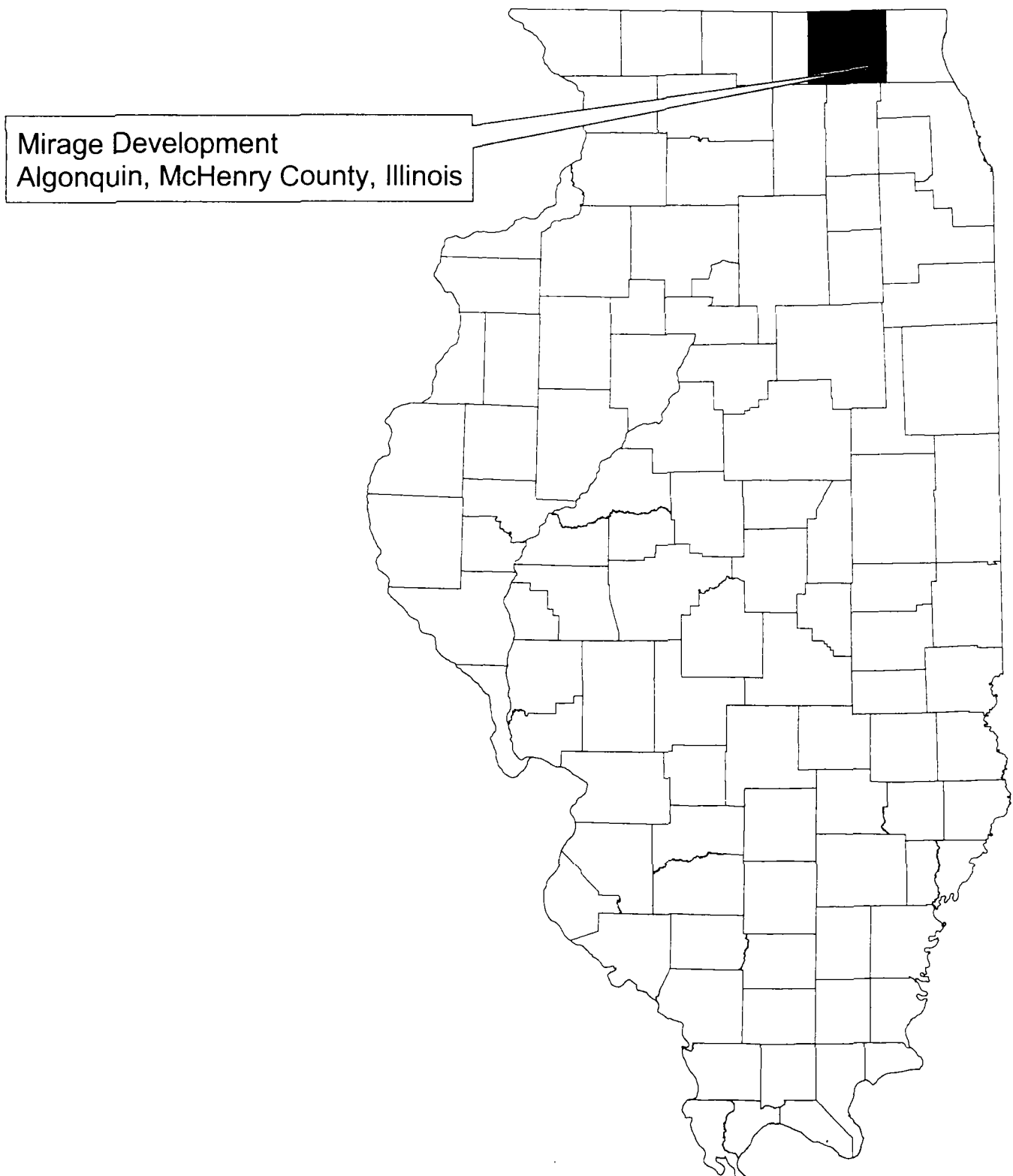
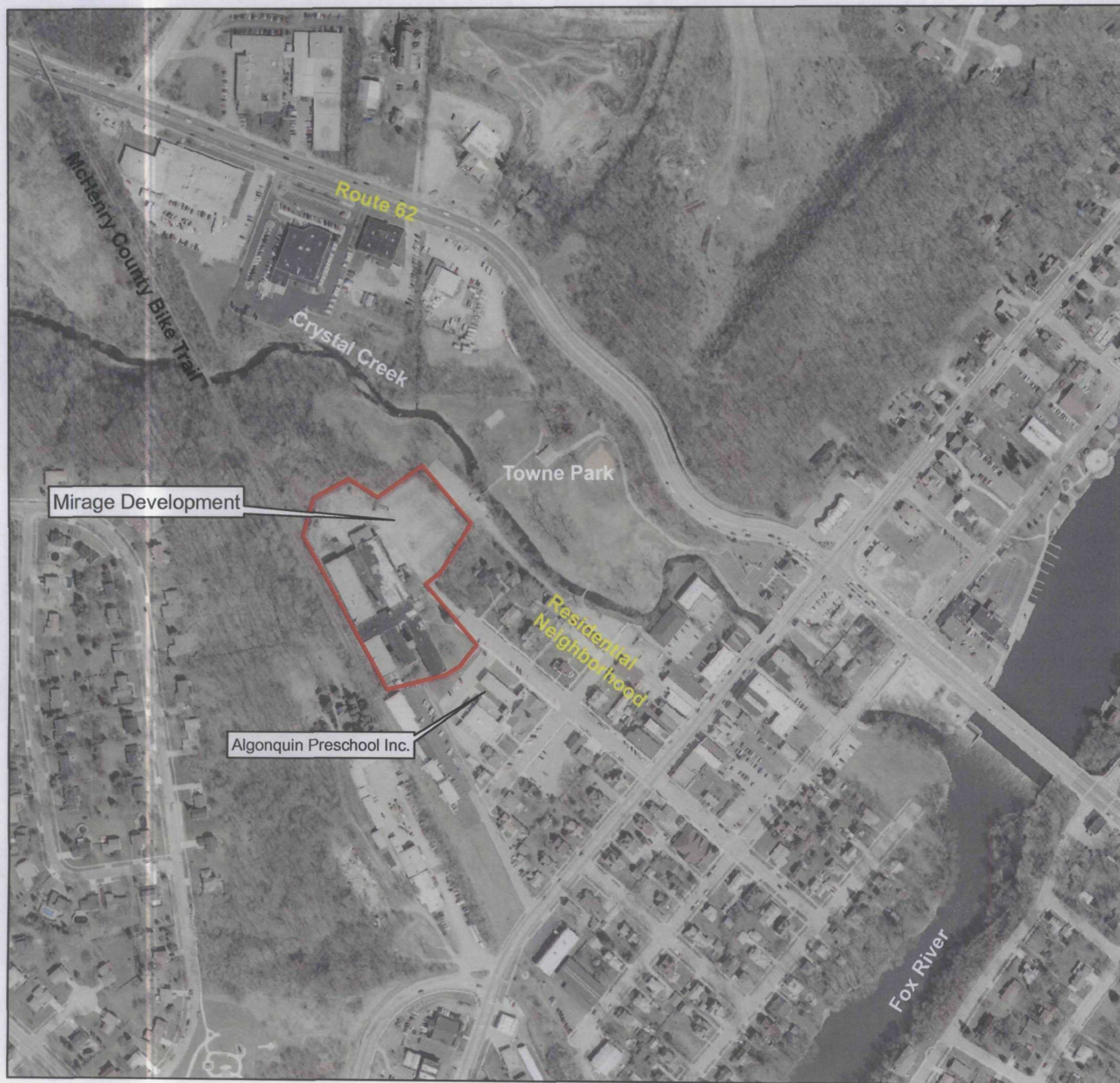


Figure - 2



Mirage Development
Figure 2
Site Area Map

0 60 120 240 360 480
Meters

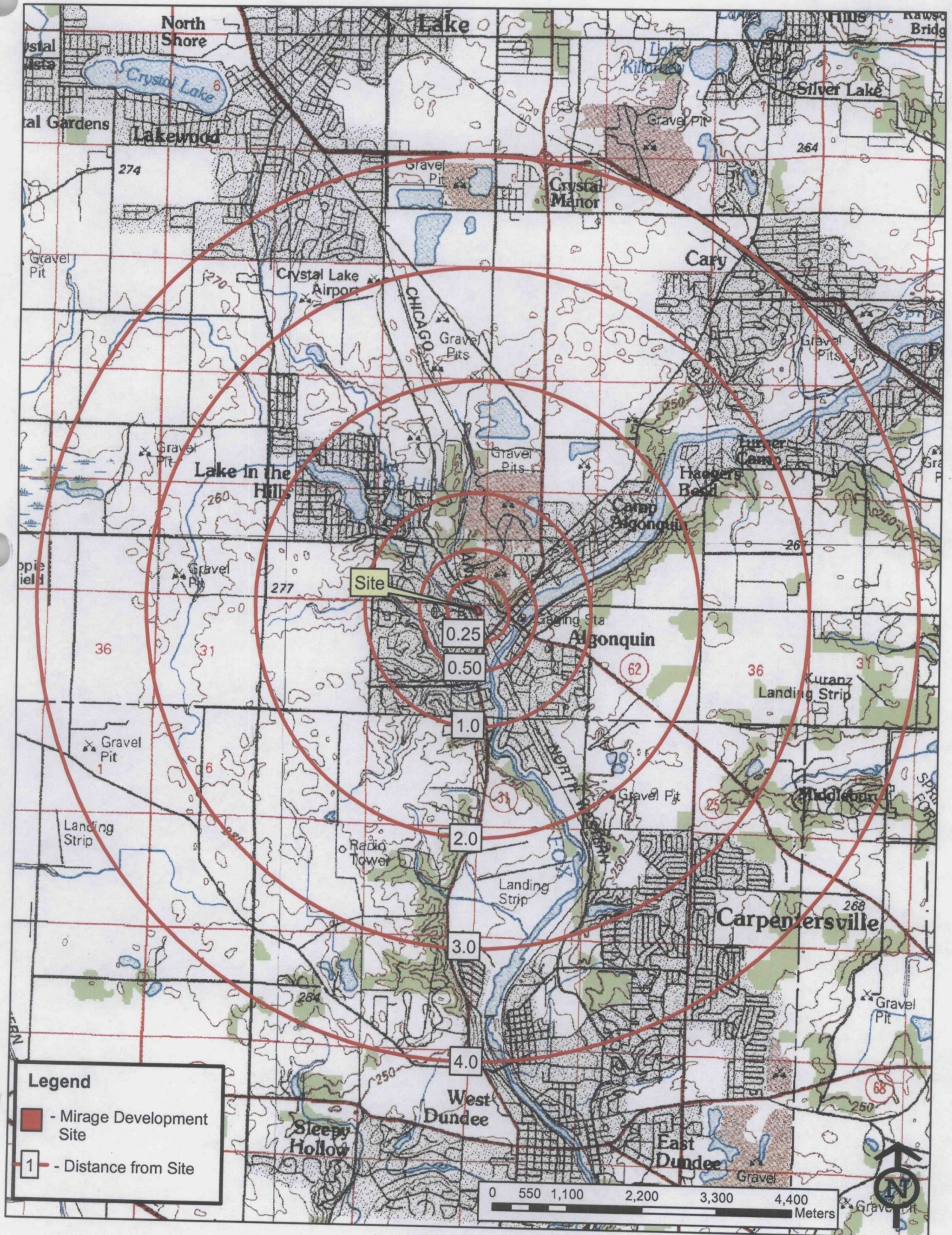


Figure - 3

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EXEMPTION 9
WELLS

Mirage Development

Figure 3
4-Mile Radius Map



Attachment A
Phase II Assessment (1992)

Attachment A

Analytical Results from Phase II Assessment (1992)

Compounds/analytes	S-1S	S-1D	S-2D	S-3D	S-4D	OS-5	S-6	S-7	S-8S	S-8D	S-9	S-10	Method Detection Limits
VOCs (ug/kg)													
1,1,1-trichloroethane	14	--	--	11	--	NA	75	NA	29000	3200	55	3300	1
Trichloroethane	--	--	16	--	10	NA	9	NA	4900	330	--	2400	1
Tetrachloroethane	--	4	--	--	--	NA	7	NA	2100	140	--	11	1
Tetrachloromethane	14	--	14	25	--	NA	--	NA	--	26	--	6	1
Methylene Chloride	--	--	--	--	--	NA	--	NA	190	460	--	--	1
1,1-dichloroethane	--	--	--	--	--	NA	--	NA	--	--	--	110	1
1,1,2,2-tetrachloroethane	--	--	7	--	--	NA	--	NA	--	--	--	--	1
1,2,3-trichloropropane	16	--	--	--	--	NA	--	NA	--	--	--	--	1
Dibromomethane	--	5	--	--	--	NA	--	NA	--	--	--	--	1
Styrene	--	--	--	--	--	NA	--	NA	--	--	30	--	1
Toluene	--	5	6	--	--	NA	--	NA	21	--	8	30	1
Ethylbenzene	--	9	--	--	--	NA	--	NA	10	--	8	10	1
Xylenes (total)	49000	85	23	3	--	NA	--	NA	40	--	26	49	3
Methyl ethyl ketone	--	--	95	--	78	NA	--	NA	--	--	--	--	50
Acetone	--	--	--	--	--	NA	--	NA	--	1300	--	--	75
METALS (mg/kg)													
Lead (total)	18	--	--	--	7.6	NA	NA	NA	3.2	NA	15	5.9	2
Cadmium (total)	--	--	--	--	--	NA	NA	NA	--	NA	--	--	2
TPH (mg/kg)	560	--	--	--	--	NA	--	--	NA	NA			10
PCBs (ug/kg)	NA	NA	NA	NA	NA		NA	NA			NA	NA	
Aroclor 1242						--			2000	--			500

NA = Not Analyzed

-- = Not Detected at the method detection limits

Attachment B
June 20, 1996 Narrative

NARRATIVE

Prepared By: Tina Kovasznay

On June 20, 1996, an inspection was conducted at 401 Washington St. in response to a special request from the Office of the Attorney General. Upon arrival on-site, I met with Bill Lensch, owner of Blue Sky Investments, who accompanied me on a tour of the property.

Prior to the site walk through, I spoke to [REDACTED] attorney. [REDACTED] stated that Blue Sky Investments is the current property owner, and that ASA/Pool America moved out of the building in 1991. According to [REDACTED], Blue Sky Investments only has title to the property with the building on it, not the other parcel containing the buried drums. Per [REDACTED], that parcel is in trust under the name ASA. [REDACTED] also stated that Blue Sky Investments is currently bringing an action against the Hussman Corporation (Toastmaster) for past contamination. Toastmaster occupied this building prior to ASA, and the on-site contamination appears to have been caused by the type of chemicals which Toastmaster used in their production process. Currently, there are thirteen different companies occupying the building, most of which do not generate any hazardous or special wastes.

Since taking possession of the property, [REDACTED] installed 3 groundwater monitoring wells on-site to determine if the groundwater has been impacted. Samples from the middle well show that the groundwater is contaminated with high concentrations of chlorinated solvents. The south well only shows very low concentrations of contaminants.

[REDACTED] and I walked behind the facility where he showed me the area where buried drums are popping out of the ground. I also observed over 80 drums of waste being stored behind the facility on property. According to [REDACTED], the drums are full of solid resin left leased by behind by ASA who manufactured hot tubs and pools. Although some of these drums did appear to be filled with a solid material, some had liquids in them. [REDACTED] stated that a consulting company had completed an assessment on the drums, but that report was not made available to me. Blue Sky.

Because Blue Sky Investments is currently bring an action against the Hussman Corporation for past contamination in order to clean up the site, it does not appear as if any action is necessary by the Agency at this time. Tom Crause, RPMS, will be made aware of the on-site contamination.

Apparent Violations

- 723.111 - A hazardous waste determination must be made on the drums being stored on-site.
- 808.121(a) - A special waste determination must be made on the drums being stored on-site.

Attachment C
September 1998 Groundwater Results

Environmental Protection Agency
EPC/OS Unit Sample Document
Analyses (circle D): Inorganic Organic
Age of

Form [10]

Section [14]

EPC # [17]

County

Locality

LP41

111002 208

McHENRY

ALGONQU 1

USEPA #

Site Name [19]

F

ILDD3961216-3

MIRAGE DEVELOPMENT

Project Manager's Name and Mailing Address

Section/Unit

BOLFO - MAYWOOD

EPA Laboratory Address and Phone Number (circle one)

GIND S. BRUNI
MAYWOOD

1701

S. FIRST AVE, Suite 200

2125 S. 1st Street

825 N. Rutledge Street

Champaign, IL 61820, 217/333-6907

Springfield, IL 62702, 217/782-9780

Phone #
708 1338-7902

Case # (if applicable)

Lab Sample # [01]

D81299-71

D81299-72

D81299-73

D81299-74

Parameter Group [03] & Other Analyses

[12]

S

Split

A

V

E

Is

Yes

(y/n)

bottle

Field

Sample #

Date

Time

Time Sealed

Sampler's

Initials

Special Notations

Seal

Intact?

(y/n)

Collection Information

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

PL# NUMBER : 0312024

PLING POINT DESC. : G101/MCHENRY/ALGONQUIN/MIRAGE DEVELOPMEN

MITTING SOURCE # : 1110055008

SITE # : ILD03961263

E COLLECTED : 980924

TIME COLLECTED : 1110

SAMPLING PROGRAM :

LECTED BY : G B

DELIVERED BY : UPS

MENTS : VOCS/LEGAL HOLD

ODING CODE : LP41

AGENCY ROUTING : --

UNIT CODE :

TYPE CODE :

SAMPLE PURPOSE CODE : F REPORTING INDICATOR : 8

E RECEIVED : 980929

TIME RECEIVED : 0915

RECEIVED BY : G S

OBSERVATIONS : 2-40ML VOCS

TRIP BL SAM# : D812027

ERVISORS INITIALS : GLG

NOTE : K = LESS THAN VALUE

418 CHLOROMETHANE	UG/L : 10K
413 BROMOMETHANE	UG/L : 10K
175 VINYL CHLORIDE	UG/L : 10K
311 CHLOROETHANE	UG/L : 10K
423 METHYLENE CHLORIDE	UG/L : 5.0K

552 ACETONE	UG/L : 10K
482 TRICHLOROFLUOROMETHANE	UG/L : 5.0K
72 BROMOCHLOROMETHANE	UG/L : 5.0K
70 CARBON DISULFIDE	UG/L : 5.0K

501 1,1-DICHLOROETHYLENE	UG/L : 5.0K
496 1,1-DICHLOROETHANE	UG/L : 11
546 TRANS-1,2-DICHLOROETHYLENE	UG/L : 5.0K
093 CIS-1,2-DICHLOROETHYLENE	UG/L : 9.2

106 CHLOROFORM	UG/L : 5.0K
531 1,2-DICHLOROETHANE	UG/L : 5.0K
595 2-BUTANONE(MEK)	UG/L : 10K
506 1,1,1-TRICHLOROETHANE	UG/L : 34

102 CARBON TETRACHLORIDE	UG/L : 5.0K
057 VINYL ACETATE	UG/L : 10K
101 DICHLOROBROMOMETHANE	UG/L : 5.0K
541 1,2-DICHLOROPROPANE	UG/L : 5.0K

704 CIS-1,3-DICHLOROPROPENE	UG/L : 5.0K
150 TRICHLOROETHYLENE	UG/L : 55
105 CHLORODIBROMOMETHANE	UG/L : 5.0K
511 1,1,2-TRICHLOROETHANE	UG/L : 5.0K

124 BENZENE	UG/L : 5.0K
694 TRANS-1,3-DICHLOROPROPENE	UG/L : 5.0K
5 2-CHLOROETHYL VINYL ETHER	UG/L : 5.0K
1 BROMOFORM	UG/L : 5.0K

PLE NUMBER : J812024

3133 4-METHYL-2-PENTANONE(MIBK)	UG/L : 10K
7103 2-HEXANONE(MBK)	UG/L : 10K
4475 TETRACHLOROETHYLENE	UG/L : 5.0K
4516 1,1,2,2-TETRACHLOROETHANE	UG/L : 5.0K

3131 TOLUENE	UG/L : 5.0K
4301 CHLOROBENZENE	UG/L : 5.0K
3113 ETHYLBENZENE	UG/L : 5.0K
7128 STYRENE	UG/L : 5.0K

1551 XYLENE	UG/L : 5.0K
2019 DEPTH TO WATER	FT : --
1993 ELEV.OF GW SURFACE	FT : --
2003 WELL DEPTH,TOTAL	FT : --

0431 ALKALINITY,TOTAL	MG/L : --
0090 REDOX POTEN.-FIELD	MV : --
0400 PH,FIELD	UNITS : --
0094 COND.(EC)FIELD	UM/CM : --

0010 TEMPERATURE,WATER DEG.C	: --
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HPLC NUMBER : D812025

SAMPLING POINT DESC. : G102/MCHENRY/ALGONQUIN/MIRAGE DEVELOPMEN

SMITTING SOURCE # : 1110055008

SITE # : ILD039612163

TE COLLECTED : 980924

TIME COLLECTED : 1200

SAMPLING PROGRAM :

LLECTED BY : G B

DELIVERED BY : UPS

MMENTS : VOCS/LEGAL HOLD

NDING CODE : LP41

AGENCY ROUTING : --

UNIT CODE :

M TYPE CODE :

SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

TE RECEIVED : 980929

TIME RECEIVED : 0915

RECEIVED BY : G S

B OBSERVATIONS : 2-40ML VOCS

TRIP BL SAM# : D812027

PERVISORS INITIALS : GLG

NOTE : K = LESS THAN VALUE

4418 CHLOROMETHANE

UG/L : 10K

4413 BROMOMETHANE

UG/L : 10K

9175 VINYL CHLORIDE

UG/L : 10K

4311 CHLOROETHANE

UG/L : 10K

4423 METHYLENE CHLORIDE

UG/L : 5.0K

1552 ACETONE

UG/L : 10K

4483 TRICHLOROFLUOROMETHANE

UG/L : 5.0K

17 BROMOCHLOROMETHANE

UG/L : 5.0K

17.1 CARBON DISULFIDE

UG/L : 5.0K

4501 1,1-DICHLOROETHYLENE

UG/L : 93

4496 1,1-DICHLOROETHANE

UG/L : 300

4546 TRANS-1,2-DICHLOROETHYLENE

UG/L : 5.0K

7093 CIS-1,2-DICHLOROETHYLENE

UG/L : 550

32106 CHLOROFORM

UG/L : 5.0K

34531 1,2-DICHLOROETHANE

UG/L : 5.0K

31595 2-BUTANONE(MEK)

UG/L : 10K

34506 1,1,1-TRICHLOROETHANE

UG/L : 6600

32102 CARBON TETRACHLORIDE

UG/L : 5.0K

7057 VINYL ACETATE

UG/L : 10K

32101 DICHLOROBROMOMETHANE

UG/L : 5.0K

34541 1,2-DICHLOROPROPANE

UG/L : 5.0K

34704 CIS-1,3-DICHLOROPROPENE

UG/L : 5.0K

39180 TRICHLOROETHYLENE

UG/L : 410

32105 CHLORODIBROMOMETHANE

UG/L : 5.0K

34511 1,1,2-TRICHLOROETHANE

UG/L : 14

78124 BENZENE

UG/L : 5.0K

34699 TRANS-1,3-DICHLOROPROPENE

UG/L : 5.0K

34 2-CHLOROETHYL VINYL ETHER

UG/L : 5.0K

3 1,4-BROMOFORM

UG/L : 5.0K

PLF NUMBER : 0812025


8133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 10K
7103	2-HEXANONE(MBK)	UG/L : 10K
4475	TETRACHLOROETHYLENE	UG/L : 17
4516	1,1,2,2-TETRACHLOROETHANE	UG/L : 5.0K

8131	TOLUENE	UG/L : 5.0K
4301	CHLOROBENZENE	UG/L : 5.0K
8113	ETHYLBENZENE	UG/L : 5.0K
7128	STYRENE	UG/L : 5.0K

1551	XYLENE	UG/L : 5.0K
2019	DEPTH TO WATER	FT : --
1993	ELEV.OF GW SURFACE	FT : --
2008	WELL DEPTH,TOTAL	FT : --

0431	ALKALINITY,TOTAL	MG/L : --
0090	REDOX POTEN.-FIELD	MV : --
0400	PH, FIELD	UNITS : --
0094	COND.(EC)FIELD	UM/CM : --

0010	TEMPERATURE, WATER	DEG.C : --
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D812026
SAMPLING POINT DESC. : G103/MCHENRY/ALGONQUIN/MIRAGE DEVELOPMEN

SUBMITTING SOURCE # : 1110055008 SITE # : ILD039612163
DATE COLLECTED : 980924 TIME COLLECTED : 1305 SAMPLING PROGRAM :

COLLECTED BY : G B DELIVERED BY : UPS
COMMENTS : VOCS/LEGAL HOLD
FINDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AN TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : 8

DATE RECEIVED : 980929 TIME RECEIVED : 0915 RECEIVED BY : G S
LAB OBSERVATIONS : 2-40ML VOCS TRIP BL SAM# : D812027
SUPERVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

34413 CHLOROMETHANE	UG/L : 10K
34413 BROMOMETHANE	UG/L : 10K
39175 VINYL CHLORIDE	UG/L : 10K
34311 CHLOROETHANE	UG/L : 10K
34423 METHYLENE CHLORIDE	UG/L : 5.0K
31552 ACETONE	UG/L : 10K
34488 TRICHLOROFLUOROMETHANE	UG/L : 5.0K
77 7 BROMOCHLOROMETHANE	UG/L : 5.0K
77 .1 CARBON DISULFIDE	UG/L : 5.0K
34501 1,1-DICHLOROETHYLENE	UG/L : 23
34496 1,1-DICHLOROETHANE	UG/L : 52
34546 TRANS-1,2-DICHLOROETHYLENE	UG/L : 5.0K
77093 CIS-1,2-DICHLOROETHYLENE	UG/L : 200
32106 CHLOROFORM	UG/L : 5.0K
34531 1,2-DICHLOROETHANE	UG/L : 5.0K
31595 2-BUTANONE(MEK)	UG/L : 10K
34506 1,1,1-TRICHLOROETHANE	UG/L : 1400
32102 CARBON TETRACHLORIDE	UG/L : 5.0K
77057 VINYL ACETATE	UG/L : 10K
32101 DICHLOROBROMOMETHANE	UG/L : 5.0K
34541 1,2-DICHLOROPROPANE	UG/L : 5.0K
34704 CIS-1,3-DICHLOROPROPENE	UG/L : 5.0K
39180 TRICHLOROETHYLENE	UG/L : 4600
32105 CHLOROCHLOROBROMOMETHANE	UG/L : 5.0K
34511 1,1,2-TRICHLOROETHANE	UG/L : 5.0K
78124 BENZENE	UG/L : 5.0K
34099 TRANS-1,3-DICHLOROPROPENE	UG/L : 5.0K
34 0 2-CHLOROETHYL VINYL ETHER	UG/L : 5.0K
5 J4 BROMOFORM	UG/L : 5.0K

PLF NUMBER : D812020

8133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 10K
7103	2-HEXANONE(MBK)	UG/L : 10K
4475	TETRACHLOROETHYLENE	UG/L : 11
4515	1,1,2,2-TETRACHLOROETHANE	UG/L : 5.0K
8131	TOLUENE	UG/L : 5.0K
4301	CHLOROBENZENE	UG/L : 5.0K
3113	ETHYLBENZENE	UG/L : 5.0K
7128	STYRENE	UG/L : 5.0K

1551	XYLENE	UG/L : 5.0K
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2019	DEPTH TO WATER	FT : --
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1993	ELEV.OF GW SURFACE	FT : --
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2008	WELL DEPTH,TOTAL	FT : --
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0431	ALKALINITY,TOTAL	MG/L : --
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0090	REDOX POTEN.-FIELD	MV : --
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0400	PH,FIELD	UNITS : --
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0094	COND.(EC)FIELD	UM/CM : --
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0010	TEMPERATURE,WATER DEG.C	: --
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 0812027
SAMPLING POINT DESC. : BLANK/0812024-026

SUBMITTING SOURCE # : 1110055008 SITE # : ILD039612163
DATE COLLECTED : 980924 TIME COLLECTED : 1110 SAMPLING PROGRAM :

COLLECTED BY : G B DELIVERED BY : UPS
COMMENTS : BLANK/0812024-026/LEGAL HOLD
FINDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
SAMPLING TYPE CODE : SAMPLE PURPOSE CODE : 8 REPORTING INDICATOR : 8

DATE RECEIVED : 980929 TIME RECEIVED : 0915 RECEIVED BY : G S
LAB OBSERVATIONS : 2-40ML VOC BLANKS TRIP BL SAM# :
SUPERVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

04418 CHLOROMETHANE	UG/L : 10K
04413 BROMOMETHANE	UG/L : 10K
09175 VINYL CHLORIDE	UG/L : 10K
04511 CHLOROETHANE	UG/L : 10K
04423 METHYLENE CHLORIDE	UG/L : 5.0K

01552 ACETONE	UG/L : 10K
04488 TRICHLOROFLUOROMETHANE	UG/L : 5.0K
07 BROMOCHLOROMETHANE	UG/L : 5.0K
0701 CARBON DISULFIDE	UG/L : 5.0K

04501 1,1-DICHLOROETHYLENE	UG/L : 5.0K
04490 1,1-DICHLOROETHANE	UG/L : 5.0K
04540 TRANS-1,2-DICHLOROETHYLENE	UG/L : 5.0K
07093 CIS-1,2-DICHLOROETHYLENE	UG/L : 5.0K

02100 CHLOROFORM	UG/L : 5.0K
04531 1,2-DICHLOROETHANE	UG/L : 5.0K
01595 2-BUTANONE(MEK)	UG/L : 10K
04500 1,1,1-TRICHLOROETHANE	UG/L : 5.0K

02102 CARBON TETRACHLORIDE	UG/L : 5.0K
07057 VINYL ACETATE	UG/L : 10K
02101 DICHLOROBROMOMETHANE	UG/L : 5.0K
04541 1,2-DICHLOROPROPANE	UG/L : 5.0K

04704 CIS-1,3-DICHLOROPROPENE	UG/L : 5.0K
09180 TRICHLOROETHYLENE	UG/L : 5.0K
02105 CHLORODIBROMOMETHANE	UG/L : 5.0K
04511 1,1,2-TRICHLOROETHANE	UG/L : 5.0K

078124 BENZENE	UG/L : 5.0K
04099 TRANS-1,3-DICHLOROPROPENE	UG/L : 5.0K
04 2-CHLOROETHYL VINYL ETHER	UG/L : 5.0K
04 4 BROMOFORM	UG/L : 5.0K

WELL NUMBER : 0812027

78133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 10K
77103	2-HEXANONE(MBK)	UG/L : 10K
54475	TETRACHLOROETHYLENE	UG/L : 5.0K
54516	1,1,2,2-TETRACHLOROETHANE	UG/L : 5.0K
78131	TOLUENE	UG/L : 5.0K
54301	CHLOROBENZENE	UG/L : 5.0K
78113	ETHYLBENZENE	UG/L : 5.0K
77128	STYRENE	UG/L : 5.0K

51551	XYLENE	UG/L : 5.0K
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72019	DEPTH TO WATER	FT : --
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71993	ELEV.OF GW SURFACE	FT : --
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72008	WELL DEPTH,TOTAL	FT : --
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10431	ALKALINITY,TOTAL	MG/L : --
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10090	REDOX POTEN.-FIELD	MV : --
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10400	PH,FIELD	UNITS : --
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10094	COND.(EC)FIELD	UM/CM : --
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10010	TEMPERATURE,WATER DEG.C	: --
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